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APPLICANT : HITACHI LTD;

INVENTOR : TAKAI MASAO;

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TITLE : SANDWICH PANEL

ABSTRACT : PURPOSE: A number of hollow balls made of high polymer material are placed between the top and under surface layers to form sandwich panels with light weight, high strength, sound-and heat-insulating properties, thus having an advantage in price.

CONSTITUTION: Surface material 1 and 1' and hollow balls 6 are integrated using an adhesive. Balls 6 are made from high-polymer materials excellent in acoustic and heat-insulating properties. As the thickness of sandwich panel increases, the distance between the tops of balls becomes longer and the depression caused by the concentration of loads increases. In order to prevent that, for example, in the case where a number of balls 6 are arranged squarely, small balls 6a are placed on the middle point between balls adjacent to each other in the diagonal direction so that the height of the small ball is made equal to that of the panel surface 1 or 1', thus shortening the distance between balls.

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